

**AMENDMENT**

**IN THE CLAIMS:**

1. (CURRENTLY AMENDED) A propulsion system comprising:  
an energy conversion device; and  
a fuel delivery system comprising a fuel deoxygenator for removing a portion of dissolved gases from a fuel and flowing to a catalyst for conditioning receiving fuel from the fuel deoxygenator and initiating endothermic decomposition of the fuel.
2. (CURRENTLY AMENDED) The assembly as recited in claim 1, wherein said fuel deoxygenator comprises a permeable membrane in contact with fuel flowing through said a fuel passage passages.
3. (ORIGINAL) The assembly as recited in claim 2, comprising a polytetrafluorethylene coating disposed on a fuel side of said permeable membrane.
4. (ORIGINAL) The assembly as recited in claim 2, comprising a porous substrate supporting said permeable membrane on a non-fuel side.
5. (ORIGINAL) The assembly as recited in claim 4, comprising a device for creating a partial pressure differential between a fuel side of said permeable membrane and a non-fuel side to draw dissolved gasses out of fuel with said fuel passage.
6. (ORIGINAL) The assembly as recited in claim 1, wherein said catalyst is exposed to a heat producing element.
7. (ORIGINAL) The assembly as recited in claim 1, wherein said catalyst is heated by fuel flowing therethrough.

8. (ORIGINAL) The assembly as recited in claim 1, comprising a housing adjacent said propulsion system, wherein said catalyst is mounted within said housing.
9. (ORIGINAL) The assembly as recited in claim 1, wherein said catalyst comprises a metal.
10. (WITHDRAWN) The assembly as recited in claim 1, wherein said catalyst comprises a zeolite.
11. (ORIGINAL) The assembly as recited in claim 1, wherein said catalyst initiates endothermic decomposition of said fuel.
12. (CURRENTLY AMENDED) A fuel delivery system for a propulsion system comprising:  
a fuel deoxygenator for removing a portion of dissolved gases from fuel; and  
a catalyst receiving fuel exiting said fuel deoxygenator and initiating endothermic decomposition of the fuel.
13. (CURRENTLY AMENDED) The system as recited in claim 12, wherein fuel deoxygenator comprises a permeable membrane in contact with fuel flowing through said a fuel passage ~~passages~~.
14. (ORIGINAL) The system as recited in claim 13, comprising an amorphous fluoropolymer coating disposed on a fuel side of said permeable membrane.
15. (ORIGINAL) The system as recited in claim 13, comprising a porous substrate supporting said permeable membrane on a non-fuel side.

16. (ORIGINAL) The system as recited in claim 13, comprising a device for creating a partial pressure differential between a fuel side of said permeable membrane and a non-fuel side to draw dissolved gasses out of fuel with said fuel passage.

17. (CANCELLED)

18. (ORIGINAL) The system as recited in claim 12, wherein said catalyst comprises a metal.

19. (WITHDRAWN) The system as recited in claim 12, wherein said catalyst comprises a zeolite.

20. (ORIGINAL) The system as recited in claim 12, wherein said catalyst is mounted adjacent a heat producing element of said propulsion system.

21. (ORIGINAL) The system as recited in claim 12, wherein said catalyst is heated by fuel flowing therethrough.

22-28. (CANCELLED)